**DECLARATION - USA PATENT APPLICATION**

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name;

I believe I am an original, first and joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled FRONT SIDE ILLUMINATED PHOTODIODE WITH BACKSIDE BUMP; the specification of which was filed on **September 23, 2003** as Application Serial No. **10/669,081**.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above;

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56;

I hereby claim the benefit under Title 35, United States Codes § 119(e) of any United States provisional application(s) listed below.

Application No.: 60/413,427

Filing Date: September 25, 2002

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful, false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of first inventor: **Jay Jie Lai**

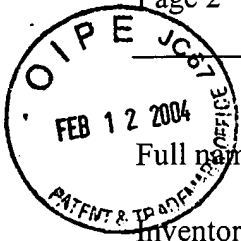
Inventor's signature _____

Date _____

Residence: **18809 Sabrina Avenue, Cerritos, CA 90703**

Citizenship: **USA**

Post Office Address: **18809 Sabrina Avenue, Cerritos, CA 90703**



Full name of second inventor: **Truc Q. Vu**

Inventor's signature Truc Q. Vu

Date 1/19/04

Residence: **13271 Marshall Lane, Tustin, CA 92780**

Citizenship: **USA**

Post Office Address: **13271 Marshall Lane, Tustin, CA 92780**

Full name of third inventor: **Gary B. Warren**

Inventor's signature _____

Date _____

Residence: **21152 Brookhurst Street, Huntington Beach, CA 92646**

Citizenship: **USA**

Post Office Address: **21152 Brookhurst Street, Huntington Beach, CA 92646**

Send Correspondence To:

KNOBBE, MARTENS, OLSON & BEAR, LLP

Customer No. 20,995

Full name of second inventor: **Truc Q. Vu**

Inventor's signature _____

Date _____

Residence: **13271 Marshall Lane, Tustin, CA 92780**

Citizenship: **USA**

Post Office Address: **13271 Marshall Lane, Tustin, CA 92780**

Full name of third inventor: **Gary B. Warren**

Inventor's signature 

Date 1/8/2004

Residence: **21152 Brookhurst Street, Huntington Beach, CA 92646**

Citizenship: **USA**

Post Office Address: **21152 Brookhurst Street, Huntington Beach, CA 92646**

Send Correspondence To:

KNOBBE, MARTENS, OLSON & BEAR, LLP

Customer No. 20,995



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Lai, et al.)
App. No. : 10/669,081)
Filed : September 23, 2003)
For : FRONT SIDE ILLUMINATED)
PHOTODIODE WITH BACKSIDE)
BUMP)
Examiner : Unknown)

ESTABLISHMENT OF RIGHT OF ASSIGNEE TO TAKE ACTION
AND
REVOCATION AND POWER OF ATTORNEY

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

The undersigned is empowered to act on behalf of the assignee below (the "Assignee"). A true copy of the original Assignment of the above-captioned application from the inventor(s) to the Assignee is attached hereto. This Assignment represents the entire chain of title of this invention from the Inventor(s) to the Assignee.

I declare that all statements made herein are true, and that all statements made upon information and belief are believed to be true, and further, that these statements were made with the knowledge that willful, false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. § 1001, and that willful, false statements may jeopardize the validity of the application, or any patent issuing thereon.

The undersigned hereby revokes any previous powers of attorney in the subject application, and hereby appoints the registrants of Knobbe, Martens, Olson & Bear, LLP, 2040 Main Street, Fourteenth Floor, Irvine, California 92614, Telephone (949) 760-0404, **Customer**

App. No. : 10/669,081
Filed : September 23, 2003

No. 20,995, as its attorneys with full power of substitution and revocation to prosecute this application and to transact all business in the U.S. Patent and Trademark Office connected herewith. This appointment is to be to the exclusion of the inventor(s) and his attorney(s) in accordance with the provisions of 37 C.F.R. § 3.71.

Please use **Customer No. 20,995** for all communications.

Microsemi Corporation

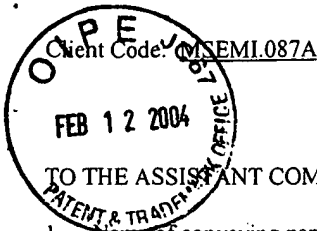
Dated: 22 Jan 2004

By: Ralph Brandi
Ralph Brandi

Title: Officer

Address: 2381 Morse Avenue
Irvine, CA 92614

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010704



Client Code: MSEMI.087A

RECORDATION FORM COVER SHEET PATENTS ONLY

TO THE ASSISTANT COMMISSIONER FOR PATENTS: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies): (If multiple assignors, list numerically)

- 1) Jay Jie Lai
- 2) Truc Q. Vu
- 3) Gary B. Warren

Additional name(s) of conveying party(ies) attached?

() Yes (X) No

2. Name and address of receiving party(ies):

Name: MICROSEMI CORPORATION
Street Address: 2381 Morse Avenue
City: Irvine State: CA ZIP: 92614

Additional name(s) of receiving party(ies) attached?

() Yes (X) No

3. Nature of conveyance:

- (X) Assignment
() Merger
() Security Agreement
() Change of Name
() Other:

Execution Date: (If multiple assignors, list execution dates in numerical order corresponding to numbers indicated in 1 above) 1) January 19, 2004; 2) January 19, 2004; 3) January 8, 2004

4. Application number(s) or Patent number(s):

() Application(s) filed herewith Execution Date(s):

(X) Patent Application No.: 10/669,081
Filing Date: September 23, 2003

() Patent No.:
Issue Date:

Additional numbers attached? () Yes (X) No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Sharon S. Ng
KNOBBE, MARTENS, OLSON & BEAR, LLP
Customer No. 20,995
Internal Address: Fourteenth Floor
Street Address: 2040 Main Street
City: Irvine State: CA ZIP: 92614
Attorney's Docket No.: MSEMI.078A

7. Total fee (37 CFR 1.21(h)): \$40

(X) Enclosed

() Authorized to be charged to deposit account

8. Deposit account number: 11-1410

Please charge this account for any additional fees which may be required, or credit any overpayment to this account.

6. Total number of applications and patents involved: 1

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct, and any attached copy is a true copy of the original document.

Sharon S. Ng
Name of Person Signing

Signature

Date

53,383
Registration No.

Total number of pages including cover sheet, attachments and document: 4

Mail documents to be recorded with required cover sheet information to:

Mail Stop Assignment Recordation Services
Director, U.S. Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

ASSIGNMENT

WHEREAS, We, Jay Jie Lai, a USA citizen, residing at 18809 Sabrina Avenue, Cerritos, California 90703; Truc Q. Vu, a USA citizen, residing at 13271 Marshall Lane, Tustin, California 92780; Gary B. Warren, a USA citizen, residing at 21152 Brookhurst Street, Huntington Beach, California 92646, have invented certain new and useful improvements in a FRONT SIDE ILLUMINATED PHOTODIODE WITH BACKSIDE BUMP, for which we have filed an application for Letters Patent in the United States, Application No. 10/669,081, filed on September 23, 2003;

AND WHEREAS, MICROSEMI CORPORATION (hereinafter "ASSIGNEE"), a Delaware Corporation, with its principal place of business at 2381 Morse Avenue, Irvine, CA 92614, desires to acquire the entire right, title, and interest in and to the said improvements and the said Application:

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to me in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, we, the said inventors, do hereby acknowledge that we have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, the entire right, title, and interest throughout the world in, to and under the said improvements, and the said application and all provisional applications relating thereto, and all divisions, renewals and continuations thereof, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof, and all rights of priority under International Conventions and applications for Letters Patent which may hereafter be filed for said improvements in any country or countries foreign to the United States, and all Letters Patent which may be granted for said improvements in any country or countries foreign to the United States and all extensions, renewals and reissues thereof; and we hereby authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said improvements to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE HEREBY covenant and agree that we will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said improvements, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing and reissue applications, make all rightful oaths and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said improvements in all countries.

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 19th day of JAN, 2004

Jay Jie Lai

STATE OF

California

ss.

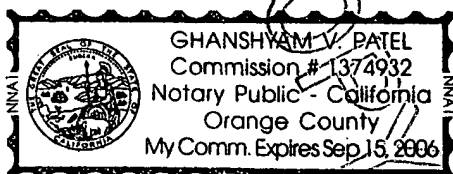
COUNTY OF

Orange

On JAN 19, 04, before me, Ghanshyam V. Patel, personally appeared Jay Jie Lai personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument, and acknowledged to me that he executed the same in his authorized capacity(ies), and that by his signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

[SEAL]



Notary Signature

Ghanshyam V. Patel

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 19th day of JAN, 2004

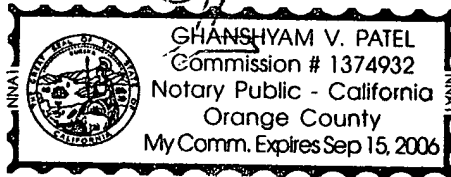
Truc Q. Vu
Truc Q. Vu

STATE OF California
COUNTY OF Orange } ss.

On JAN 19, 2004, before me, Ghanshyam V. Patel personally appeared he personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument, and acknowledged to me that he executed the same in his authorized capacity(ies), and that by his signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

[SEAL]



Ghanshyam V. Patel
Notary Signature

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this _____ day of _____, 20__.

Gary B. Warren
Gary B. Warren

STATE OF _____ }
COUNTY OF _____ } ss.

On _____, before me, _____, personally appeared Gary B. Warren personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument, and acknowledged to me that he executed the same in his authorized capacity(ies), and that by his signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

[SEAL]

Notary Signature

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this ____ day of ____, 20__.

Truc Q. Vu

STATE OF

ss.

COUNTY OF

On ____, before me, ____, personally appeared he personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument, and acknowledged to me that he executed the same in his authorized capacity(ies), and that by his signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

[SEAL]

Notary Signature

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 8 day of Jan, 2004

Gary B. Warren

STATE OF

ss.

COUNTY OF

On ____, before me, ____, personally appeared Gary B. Warren personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument, and acknowledged to me that he executed the same in his authorized capacity(ies), and that by his signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

[SEAL]

Notary Signature